Harmonization, bilaterals and other scary things

### By Bill O'Brien

Like most technicians, I have labored hard all my life to make my aviation maintenance world as cozy and predictable as possible. My little world is not very big but it is a happy one.

In my world, I do the same things every day. I talk to the same folks, and do the same work the same way. I like my world for I control my fate.

On Jan. 1, 1994, I lost some control. My ship lurched 30 degrees to port, and someone knocked on the door of my domain. On that day my aviation maintenance world got a lot bigger, a little more uncomfortable and just a tad scarier. So, my friends, did your world.

What happened on New Year's Day? A major change happened in the aviation maintenance community. Starting on Jan. 1, 1994, the Joint Aviation Authorities (JAA) of Europe will recognize, without a bilateral agreement, U.S. certified repair station's maintenance performed on JAA aircraft, — only if that maintenance is conducted in accordance with JAA supplement to their Part 145 Inspections procedures manual, and the repair station is on their accepted list of maintenance facilities.

Jan. 1, 1994 is also the day we began the harmonization process in earnest.

#### What is Harmonization?

First of all, this particular maintenance harmonization process with the JAA has been going on for over seven years, so it's not a new idea. The United States has signed aircraft certification agreements with other countries dating as far back as 1927.

Harmonization is simply the means of making FAA and JAA and other foreign Civil Aviation Authorities (CAA) regulations meet a similar airworthiness standard. Another definition of harmonization is an attempt at the leveling of global competition on the aviation maintenance playing field. Still, another way of looking at this harmonization process is as "Day 1" in the genesis of a global airworthiness standard recognition system.

### Why Harmonize?

FAA and JAA are harmonizing their regulations because the aviation community, on either side of the Atlantic, can no longer afford the high costs associated with manufacturing, selling, leasing or maintaining the world's air carrier aircraft fleet using 20 + different sets of Civil Aviation Authority (CAA) Regulations.

What's causing these high costs? Bureaucracy for one. Too many governments having too many rules which say the same thing. Government imposed regulatory compliance costs to the aviation industry are unbelievably high. Boeing has estimated that it cost an additional billion dollars to the B-747 development program just to satisfy all the world's aviation regulatory requirements. Similar regulatory restrictions have added operating costs to U.S. operators of foreign manufactured aircraft when specialized maintenance or component overhauls are done overseas. Mountains of bureaucratic red tape at every border have cost aviation jobs, slowed economic growth and increased the bureaucracy.

In addition the U.S. taxpayer is hurt. John Q. Public must pay the cost of maintaining FAA surveillance and initial and recertification costs of over 235 foreign FAA repair stations in Europe. If we harmonize our rules we can reduce the costs of government oversight and speed up the transfer of goods and services between countries.

So why is this harmonization process a big deal for technicians? The big deal is — harmonization is bringing change and change is always scary.

Let's look the devil in his eye and see what the real impact is. In a "harmonized" aviation maintenance environment an FAA certificated domestic Part 145 repair station with JAA authority will have an easier access to a highly technical European market of over 350 million people and thousands of JAA air carrier aircraft.

JAA member countries, with whom we will have a bilateral agreement with, will recognize work performed on JAA air carrier aircraft and components that are signed off by these same domestic JAA approved FAA Part 145 repair stations. Harmonization means a bigger market, more customers and more profits.

The foreign FAA repair stations in Europe will have the same access to over 5,500 U.S. registered air carrier aircraft and their maintenance needs just like they always have. The FAA will recognize work performed and signed off on U.S. registered air carrier aircraft and their components by foreign FAA Part 145 approved repair stations located in JAA member countries.

Harmonization means a level playing field for global competition. Harmonization also means we all must adopt a professional and more competitive way of doing business.

# How is it Going to Work?

FAA and JAA are going to facilitate the harmonization process by recognizing each other's regulations and by signing a proposed government to government agreement called a bilateral. Seventeen of the 23 member countries of the JAA will participate. An FAA suggested format for a bilateral would address reciprocal maintenance procedures and would be composed of two parts: The first part would be an umbrella agreement. This would be government to government agreement that would be negotiated and entered into through an exchange of diplomatic notes. The umbrella document would be of a general nature, and provide guidance on the mutual cooperation and responsibilities between the Civil Aviation Authorities (CAA). This first part of the proposed bilateral would be essentially identical from country to country.

The second part of the proposed bilateral document would be the technical implementation procedures, referred to as the "IPs." The IPs are the portion of the bilateral that maintenance personnel would be the most concerned with, for they contain the standards, policies and procedures under which each civil aviation authority has agreed to use or follow when performing work on behalf of another CAA. There could be IPs for a variety of technical subjects, such as aircraft certification, maintenance, approvals, simulators and environmental concerns. The best part of having the IPs is that they would be negotiated between the technical staff at the FAA and the CAA and would be signed by the FAA Administrator and his CAA counterpart. Unlike the umbrella portion of the proposed bilateral, the IPs may differ between countries, depending on various levels of work each country agrees to perform for each other. It should be kept in mind the signing of an IP in no way relieves the FAA or the CAA of their responsibilities under the laws and regulations of their own countries. The IP process is merely a way to allow the FAA and Civil Aviation Authority to confirm data for each other by using agreed upon procedures.

How Long Will it Take to get Bilaterals?

It could be a long time. Due to the fact the JAA is not a recognized Civil Air Authority but a committee formed of all of the JAA member nations, we must have a bilateral with each of the 17 countries that are members of the JAA.

Those of us that have worked for, or have done business in the European market, can attest to the magnitude of effort it will take to interact successfully and get bilateral agreements with 17 different state departments and Civil Aviation Authorities.

The United States is not exactly moving into these bilateral agreements at warp speed either. As of Dec. 13, 1993, the FAA received "provisional" approval from the U.S. State Department for the format to be used in the new bilaterals. Once the State Dept. has given its OK on the bilateral concept, then FAA must take the proposal to the full Interagency Group for International Aviation for U.S. government policy approval. This too will take some time.

The only sure thing we can count on in developing these proposed bilaterals, even in this wondrous and fast-paced age of spandex tights vs. cellulite, instant global communication, and in-flight repair of near-sighted space telescopes, is that diplomacy has been, and forever will remain, a slow, tiresome and murky bureaucratic business.

### What's Going to Happen in the Meantime?

We first have to nail down a few bureaucratic facts. Remember, it was a JAA requirement to have all FAA domestic repair stations doing business in Europe get "JAA Approval," not an FAA requirement.

Second, by law, the FAA can't enter into any agreement with another country unless it's a bilateral. So if we did nothing, on Jan. 1, 1994, the JAA requirement would have expired from FAA domestic repair stations, which would then be unable to compete in Europe. We need some sort of process to do work with one another until the diplomatic wrinkles are ironed out. In an effort to turbocharge the sloth-like governmental process, small understandings between countries are vital. Therefore, last year the FAA and JAA have agreed to develop a process for assessing each other's (FAA and CAA's) ability to provide surveillance to repair stations that perform work only on air carrier equipment.

The FAA/JAA have already "assessed" five repair stations here in the southwestern United States. Those repair stations did just fine.

Now, FAA/JAA teams are performing assessments on five repair stations each, in the United Kingdom, France and Germany to see how they fare.

Besides validating the FAA/JAA assessment plan, these initial assessments will serve two major purposes: First as a confidence builder in each Civil Air Authority's abilities and application of the Federal Aviation Regulations (FAR) and the Joint Airworthiness Regulations (JAR). Second, it will identify points that must be included in the technical portion of the bilateral agreement. A detailed report on these initial assessment findings is due June 27, 1994. I believe that shortly afterward, information covering the assessment process will be presented to industry on both sides of the Atlantic.

Understand that neither the FAA or JAA is required to accept the finished "process" for joint assessments. This kind of "definite maybe" way of doing business may sound strange. But to reach a government to government consensus, the use of soft words like "may," "initial," "proposed" and "assessments," are the built-in safeguards that allow governments maneuvering room in high-level talks. Besides, any kind of agreements between countries should be approached with the same care and caution as porcupines making love, in order to ensure a "win-win" situation.

While this "process" is being worked on, the JAA has initially agreed to accept all work performed by FAA domestic repair stations who apply to the JAA and submit a supplement to their inspection procedures manual.

Does Anyone Care Here in the United States About Being Harmonized?

Early last year the FAA sent letters to all FAA repair stations notifying them of JAA intentions of limiting the European market to only those repair stations that have JAA approval. Over 1,000 U.S. domestic repair stations, almost one-fourth of the total number of repair stations, have notified the JAA prior to the Sept. 30, 1993 deadline, of their intention to become JAA approved.

For an FAA repair station to comply with the JAA mandate, it requires a supplement to existing FAA Part 145 repair station's Inspection Procedures Manual. The supplement must spell out the additional JAA requirements the repair station must meet, as well as to serve as a reminder that the organization is now performing maintenance in accordance with an international agreement.

What Additional Requirements Will the Supplement Address?

The following is an overview of the supplement and the areas that it must address:

- Scope of work: In other words, what are you approved to work on by the FAA.
- Access by both the FAA and the JAA: This includes a statement allowing a JAA inspector or FAA inspector to perform a JAA inspection of your facilities.
- Work orders and customer instructions: A statement that states that a foreign operator must supply you with clear instructions and any additional maintenance related data that you might not have access to like an Airworthiness Directive issued by a foreign country.
- Approved design engineering data: Data must be approved by either the type certificate holder, or data supplied by the customer and approved either by the FAA or the appropriate JAA Civil Air Authority.
- Airworthiness Directives: The customer will supply any Airworthiness Directives that are applicable to his or her aircraft. If there is no customer, then the repair station will comply with any applicable FAA-issued Airworthiness Directive.
- Major repairs, alterations and modifications: For JAA aircraft, the customer is responsible for providing the repair station with the appropriate data. If there is no customer, then FAA approval will be required.
- Release of components after maintenance: All work must be returned to service in accordance with FAR Part 43, section 43.9, and any additional requirements called out in the JAA amendment.
- Validating the Certificate of Airworthiness Effectiveness: Almost all JAA aircraft Certificates of Airworthiness (C of A) have an expiration date. The repair station will be required to check the date and see if the C of A is current. If the C of A is out of date, the repair station must inform the customer that his airworthiness certificate is not valid. If the customer still does not renew the C of A, then the repair station will include a reference to the invalid certificate in the approval to return to service statement.
- Release of the aircraft after maintenance: This paragraph is applicable to FAR 145 repair stations with an aircraft rating. It spells out the proper maintenance certification to be used for releasing an aircraft to service after all the work has been accomplished, and the entry to be used when not all maintenance is completed.
- Reporting of unairworthy conditions: This paragraph in the amendment requires the repair station to report all serious defects to the JAA customer.
- Quality monitoring system: This is a different concept than the quality control or inspection system found in most FAA Part 145 repair stations. A Quality Monitoring (QM) system is an independent, top level review, that includes monitoring the overall repair station operation including the inspection process. The QM system will focus on whether the stated procedures and standards in the repair station manual are actually being followed, and whether they are effective in meeting the overall goals for maintaining airworthy products.

Once the supplement to the repair station manual is accepted by the JAA, the FAA repair station is approved and placed on an acceptance list. This list will be updated by the JAA quarterly. If your repair station did not make the list in time for the JAA Sept. 30, 1993, deadline, then you cannot perform maintenance on JAA aircraft or component parts as of Jan. 1, 1994.

However there is a small possibility that some FAA repair stations may receive a letter from the JAA authorizing them to perform maintenance on JAA aircraft, even though they are not yet on the first quarter's list.

Either way letter-authorized repair stations and new repair stations must apply for the acceptance list prior to the last day of April in order to perform maintenance on JAA aircraft starting on May 1. You may contact the JAA for further information at:

JAA Headquarters Saturnusstraat 10 P.O. Box 3000 2130 KA Hoofddorp Netherlands

Attention: Robert Williams, Maintenance Director

JAA telephone: 31 2503.24112 (International) JAA fax: 31 2503.21714 (International)

In addition to the supplement to the repair station manual, a payment of a yet undetermined fee (my best guess is a \$1,000) will be charged by the JAA. Then finally, a sampling of approximately 10 percent of the FAA domestic repair stations will be assessed to see if they do indeed meet all the requirements of JAA supplement and FAA Part 145 by a team of FAA and JAA inspectors.

## Some Closing Thoughts:

Even as you read this article, Flight Standards District Office FAA airworthiness inspectors will have just finished a two-day training course in Washington on JAA requirements. They have received the very latest information on harmonization, bilaterals and other scary things from FAA headquarters and JAA representatives.

If you want to be a JAA certified repair station, talk to your inspector after Feb. 1 he or she should be able to help you to compete in a global market.

The FAA/JAA Part 145 repair stations with the best people, the best manual, the best on-time delivery and the best quality control will win, and win big in this brave, new, harmonized world. Those that are too comfortable to compete, too cozy to move from its little niche, happy doing business as usual, will lose.

In the final analysis, I can't guarantee you that this harmonization process will be pain free, but I will guarantee you that it will be interesting.